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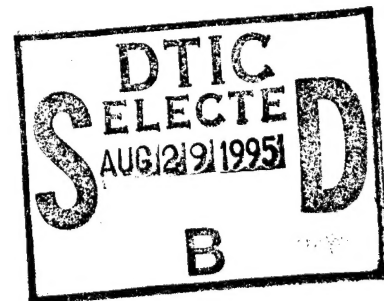Stennis Space Center, MS 39529-5004

Naval Text Product Standard Requirements Analysis and Recommendations

TOM FETTERER

Planning Systens Incorporated
Slidell, LA

SUSAN CARTER
KEVIN SHAW

Mapping, Charting, and Geodesy Branch
Marine Geosciences Division

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Under the direction of Defense Mapping Agency (DMA) Systems Center, the Naval Research Laboratory Digital Mapping, Charting, and Geodesy Analysis Program has initiated an effort to collect data from the Navy and Marine Corps on the use of DMA paper textual products in the hope of better defining the direction of the digital Text Product Standard (TPS) development effort to optimally serve user requirements. The survey (Appendix B) attempts to ascertain user requirements with regard to text products used, frequency of use, and products used in conjunction with one another. This information will enhance the immediate usefulness of eventual TPS digital products as well as help meet the mission requirements of the users.

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Contents

Text Product Standard User Recommendations Report

1.0   Introduction

Under the direction of Defense Mapping Agency (DMA) Systems Center, the Naval Research Laboratory (NRL) Digital Mapping Charting, and Geodesy Analysis Program (DMAP) has initiated an effort to collect data from the Navy and Marine Corps on the use of DMA paper textual products in the hope of better defining the direction of the digital Text Product Standard (TPS) development effort to optimally serve user requirements. The survey (Appendix B) attempts to ascertain user requirements with regard to text products used, frequency of use, and products used in conjunction with one another. This information will enhance the immediate usefulness of eventual TPS digital products as well as help meet the mission requirements of the users.

The survey contained questions designed to profile the future digital text products user. These questions included an outline of their computer hardware, a listing of current text publications used, and several questions aimed at product usage. It was particularly important to anticipate which functional requirements were significant to the user and how a digital product could help them accomplish their mission. Seventy-two surveys were returned out of the 215 mailed with Navy being the primary respondent (see Table 1).

Table 1. Service participation

Total	Navy	Marine Corps
72	65	7

2.0   Approach

To initiate a focused survey, DMAP first created a mailing list of Navy and Marine Corps users of the target text publications for the Text Product Standard's Prototype II effort. These target publications were the DMA's Fleet Guides and Sailing Directions publications. Our purpose was to survey the users of these target publications to determine their requirements in regard to text products and to try to identify ways of incorporating their requirements in the design of the Text Product Standard.

The data from which we assembled our mailing list was provided by DMA and consisted of all recently distributed hydrographic related publications. This database was then cross-referenced by DMA customer number with lists of all Marine Corps and Navy customers of DMA. It was found that of the 3221 Navy users and 633 Marine Corps users of one or more of the 22 most heavily used hydrographic related publications, 764 Navy and 12 Marine Corps units

used one or more of the target publications. Because of the small number of Marine Corps users, it was decided to survey all of those identified. The number of Navy users was such that further reduction was necessary.

The list of Navy users was then manually examined to determine a representative cross-section of Navy units to survey. As most of the users were on Navy ships, the majority of our survey list remains shipboard navigators. The rest of the list was edited to include representatives of a diverse cross-section of Navy users. This group included tactical air control and air reserve groups, SEAL teams, representatives of the submarine service, Navy research organizations, naval special warfare groups, education and training units, intelligence, ship and submarine building organizations, and the Military Sealift Command.

The user survey was then sent to the 215 identified users and their responses were evaluated along with information collected at a TPS user conference held at Stennis Space Center on 7-8 March, 1995. This conference included representatives from DMA, NRL, and Science Applications International Corporation (SAIC), as well as future user community representatives from the Naval Oceanographic Office and the Naval Sea Systems Command. Appendix C contains a listing of workshop attendees.

3.0   A Profile of Future Naval TPS Users

The typical potential TPS user from our survey was a shipboard navigator. The prevailing hardware was an MS-DOS-based (96%) 386 (36%) or 486 (54%) personal computer usually running Windows Version 3.1 (see Tables 2 and 3). Most (75%) had at least access to a CD-ROM drive (see Table 4). Less than 4% reported using a UNIX platform and no respondents mentioned Macintosh usage. Also, 10% reported that they use computers below the 386 level (note that the total is greater than the 72 responses, as some reported the presence of more than one computer).

The typical survey respondent used a computer mainly for report generation. Several mentioned that the ability to cut and paste material from a digital text product into a report would be very useful for this activity. The indications were that, in many commands, the navigators themselves, through their own interest in computers, were the driving force in the use of digital products. A number of users requested additional information on the digital products mentioned in the survey.

Many navigators also feel there should be some type of training program to deal with navigation using digital tools (digital maps and TPS products). It was also expressed that a standard navigation hardware configuration should be developed to aid them in choosing and justifying system acquisition.

Table 2. What computer hardware configuration do you use?

8088	286	386	486	Pentium	Integraph	SGI
1	6	26	39	0	1	2

Table 3. What operating system/windowing system do you use?

DOS	Macintosh	Other
67	0	4

Table 4. Do you have a CD-ROM drive?

Yes	No
54	17

4.0 Current Hardcopy Text Product Usage

Most users indicated that they had most of the 22 text publications listed in the questionnaire on-hand. Appendix A displays an in-depth profile of responses received. To see the effect of these numbers, the average rank per product was used to determine the most and least used (Table 5). This average rank was determined by taking the sum of the products of the 22 potential ranks and their frequencies divided by the total number of users of that publication.

$$\frac{\sum (\text{ frequency of rank } * \text{ rank })}{\text{number using that publication}}$$

Despite user concerns that their hardware could not support a digital text product system, the survey group was overwhelmingly in favor of the move toward digital products. This interest was particularly evident from users with limited storage space for the many publications they require, such as the submarine commands.

The top six paper publications used by our survey group included:

Notice to Mariners
DMA Hydrographic Product Catalogs
Notice to Mariners Summary of Corrections
Sailing Directions
Fleet Guides
Chart No. 1

Table 5. Use of DMA text-based products from most to least used

Weighted Ratio	Total # of Questionnaires Responding	Product
2.92 (most used)	62	Notice to Mariners
4.02	66	DMA Hydrographic Product Catalogs
5.05	60	Notice to Mariners Summary of Corrections
5.64	63	Sailing Directions
7.53	60	Fleet Guides
8.22	64	Chart No. 1 - Nautical Chart Symbols and Abbreviations
8.80	60	List of Lights including Radio Aids & Fog Signals
9.54	61	American Practical Navigator
9.63	62	USCG List of Lights
9.84	63	Hydrographic Products Semiannual Bulletin Digest
10.64	56	Sight Reduction Tables for Marine Navigation
11.08	65	World Port Index
11.32	63	Distances Between Ports
12.45	60	International Code of Signals
14.45	53	Sight Reduction Tables for Air Navigation
15.2	56	Radio Navigational Aids
15.63	57	Maneuvering Board Manual
15.87	54	Radar Navigation Manual
15.89	56	Glossary of MC&G Terms
15.91	53	Handbook of Magnetic Compass Adjustments
16.06	54	Guide of Marine Observing and Reporting
19.94 (least used)	52	Gazetter of Undersea Features

The majority of those responding (55%) used no digital products at all (see Table 6). Of those using digital products or services, NAVINFONET was accessed by 62%, well ahead of the

second most used digital product, Digital Chart of the World (28%). No other digital product was used by more than 12% of respondents. Several users mentioned the use of commercial and non-DMA mapping products, such as Automated Notice to Mariners System (ANMS) and Trimble Marine's NavGraphic which can be interfaced directly with the Global Positioning System (GPS).

The paper nautical chart is still the main source of information for our surveyed user. These charts are supplemented primarily with information from Sailing Directions, Fleet Guides, Chart No. 1, and Notice to Mariners. However, over 35 different publications were mentioned by navigators as being used in conjunction with charts, mostly for mission planning and route selection. Actual navigation activities involved a much smaller number of text publications, including USCG List of Lights, Chart No. 1, and Sight Reduction Tables.

Table 6. Are you currently using DMA digital products?

# of Respondees	DMA Digital Product	# of Respondees	DMA Digital Product
2	ARC Digitized Raster Graphics	1	ARC Digital Raster Imagery
0	Compressed Aeronautical Chart	0	Compressed ARC Digitized Raster Graphics
1	Controlled Image Base	0	Compressed Raster Graphics
1	Digital Bathymetric Database	9	Digital Chart of the World
0	Digital Feature Analysis Data	3	Digital Nautical Chart
0	Digital Point Positioning Database	3	Digital Terrain Elevation Data
0	World Magnetic Model	4	World Vector Shoreline
20	Navigation Information Network	40	Do not use digital products
5*	ANMS, Trimble Navigation Graphic Charts, GETAMAP, Integraph file of Chart No. 1 Symbols, World Port Index		

*One or more of these products used by five different respondents.

5.0   Indexing and Search Criteria

The text product user overwhelmingly used multiple paper products concurrently. Not surprisingly, the most often cited examples were Fleet Guides, Sailing Directions, or List of Lights with Nautical Charts. Most comments indicated that Fleet Guides and Sailing Directions gave the navigator useful information to apply to their charts, meaning that the chart is the primary product used and the text product is secondary. One user stated that "Referencing a 'text product' without the area chart is a waste of time". Not surprisingly then, the most useful potential search criteria reported by users for retrieving information from a digital text product was latitude/longitude and DMA chart number.

In survey questions ranking the contents of Sailing Directions according to their navigational importance and frequency of use, again using the same weighting mechanism, dangers, chart information, ports, and navigation were most often ranked first (see Table 7). Users also commented that they would like to see the use of color and special formatting (flashing titles or bold type) to highlight dangers and special warnings.

Therefore, to be most useful, the indexing of digital text publications such as Sailing Directions and Fleet Guides, should include parameters obtained directly from nautical charts. This should include latitude/longitude and chart number as well as the same approach and harbor names found on charts and possibly country or area names. Other possibilities include country code or geographical region. Subsequent menus should include dangers, supplemental chart information, ports, coastal features, currents, and warnings/hazards/obstructions.

Table 7. Navigational importance of Sailing Directions contents, most to least

Weighted Ratio	Total # of Questionnaires Responding	Content Category
3.19 (most)	64	Dangers
4.54	65	Chart Information
5.52	63	Ports
6.33	63	Coastal Features
6.66	64	Current Directions
7.30	64	Special Warnings
7.79	61	Light and Fog Signals
7.86	64	Soundings
7.98	62	Courses
8.59	66	Coastal Winds, Currents, and Ice
9.54	63	Bearings
9.65	63	Distances
10.28	64	Geographic Names
11.21	63	Heights
13.05	63	Radio Navigation Aids
13.75 (least)	63	Index-Gazetteer

6.0   Distribution and Update

It was found that Notice to Mariners, DMA Hydrographic Product Catalogs, and Notice to Mariners Summary of Corrections were reported to be the most used of the text products on-hand. This indicates that an emphasis on update and correction is primary among these text

product users. Table 8 shows updating is currently most often done manually from the Notice to Mariners. A digital alternative to these time-consuming manual updates was a common request of users who suggested possibly using the NAVINFONET network currently accessed by more than 40% of respondents who currently use digital products.

Several mentioned the difficulty in getting charts and other products from DMA in a timely manner. Again, it was the hope of some users that a vehicle such as NAVINFONET could be used for the ordering and distribution of DMA products, as well as updates and corrections to those products.

Table 8. How are your text-based products normally updated?

NAVINFONET	Addendum	Notice to Mariners	Hard Copy Replacement
18	6	64	39
Other: Automatic distribution, Local Notice to Mariners, Summaries			

In the course of using and updating publications, users overwhelmingly (96%) add notes, corrections, or other marginalia (see Table 9). This indicates that a primary requirement of any digital text product would be that of storing and indexing this user information. This could be particularly important when updates are slowed or incomplete. There was some interest in the exchange of this information between users. It was felt that information such as obstructions not on the chart, or features changed since the last update, could be useful in navigating in strange waters, and that first-hand experience was especially helpful.

Table 9. Are notes, corrections, and other marginalia added to your paper text documents?

Often	Sometimes	Never
40	30	3

7.0 Training and Hardware

The need for a "user friendly" environment which will make the job of the navigator easier rather than harder was a primary concern. This included concerns about digital text products requiring more computing power or more memory than was currently available. There were also concerns about a steep learning curve involved with the use of digital text products. For this reason, respondents felt that a hardware program to upgrade computers and peripherals is needed, as well as a training program in computer applications to navigation and the use of digital mapping products. This need highlights the problem that as many as 35% of projected users in our survey may not have the hardware to support a TPS digital text product. The reasons included the lack of a CD-ROM drive, not being able to run Windows, or a processor less than an 80386 (which we are assuming will be the bare minimum processor required for TPS products).

Because it is assumed that most users who did not respond were either disinterested in digital applications or did not have access to computer equipment, this problem could be much larger.

8.0   Other Findings

- Users frequently suggested that more photographs, preferably color photos, be included in Sailing Directions. They felt that photographs show what an approach looks like much better than the current line drawings or descriptions. There were also several requests for the inclusion of photos of the navigational aids used in a particular area.
- Many users wanted to see reference products such as tide tables, list of lights, and sight reduction tables accessible from a digital text environment. Other requested materials were Distances Between Ports and a digital Hydrographic Products Catalog.
- Several users would like digital mapping systems to interface with GPS and other onboard navigational tools. At least one respondent is currently using Trimble Marine's NavGraphic (which interfaces with a variety of navigational devices) as a primary navigational resource.

9.0   Conclusions

1. Navigators are, at present, the driving force in the use of digital products.
2. The majority of survey respondents used no digital products at all. Of those that did use digital products, NAVINFONET was used by 62%. The second most used digital product was Digital Chart of the World (28%).
3. The average computer used by those in our survey was a 386/486 PC. There were no Pentium-based or Macintosh machines, and only three UNIX workstations reported.
4. The paper products most used in conjunction with nautical charts were Fleet Guides, Sailing Directions, and List of Lights.
5. Fleet Guides and Sailing Directions provide ancillary information to charts and are not routinely used individually.
6. The primary search criteria for retrieving information from a digital text product envisioned by those responding to the survey was latitude / longitude and DMA chart number.
7. Sailing directions is most valued as a reference to information concerning dangers, chart information ports, and navigation.
8. The most used text publications overall were Notice to Mariners, DMA Hydrographic Product Catalogs, and Notice to Mariners Summary of Corrections. This emphasizes correction and update as primary concerns of the paper text product user.
9. In the course of chart and paper text product usage, 91% of users responding to our survey routinely added notes, corrections, and other marginalia to these materials.

10.0   Recommendations

1.   Send DMA's Digitizing the Future to those users who requested additional information on digital products.
2.   Use color, special formatting, or easy-to-recognize symbols to emphasize dangers and special warnings in digital Sailing Directions publications.
3.   Indexing of Sailing Directions should include parameters obtained directly from nautical charts. This would include latitude and longitude, chart number, approach and harbor names, and country or area names. Other possibilities are country code and geographic region. Associated with each of these initial index items should be dangers, supplemental chart information, ports, coastal features, currents, and warnings/hazards/obstructions.
4.   Provide a method of updating digital products that requires a minimum of user interaction possibly incorporating NAVINFONET.
5.   Provide a streamlined mechanism for ordering DMA products from the field.
6.   Initiate a program that provides training in digital applications to navigation involving both digital text and mapping products.
7.   Include more photographs (preferably color) in the digital Sailing Directions, as well as photos of the navigational aids expected in a particular region.
8.   Provide an intuitive interface to digital text products to ease the transition between paper and their digital counterparts.
9.   Provide access within Sailing Directions and Fleet Guide to reference products such as List of Lights, Tide Tables, World Port Index, Sight Reduction Tables, and Distances Between Ports.
10. Develop standard hardware configuration recommendations for TPS products to aid users in the justification and acquisition of equipment. This configuration should be at least a 486-based personal computer with 8 MB of RAM, a 540 MB hard drive, and a quad-speed CD-ROM drive.

11.0   Acknowledgments

Appendix A.

Additional Survey Information

The following tables are a complete listing of information obtained from survey questions 1, 6, and 13.

Table 10. Which of the listed publications do you currently use?

# of Respondees	Publication	# of Respondees	Publication
63	American Practical Navigator	18	Gazetteer of Undersea Features
43	Glossary of MC&G Terms	60	USCG List of Lights
43	Handbook of Magnetic Compass Adjustments	63	International Code of Signals
63	List of Lights including Radio Aids & Fog Signals	67	Notice to Mariners
50	Sight Reduction Tables for Marine Navigation	66	Sailing Directions
37	Sight Reduction Tables for Air Navigation	53	Maneuvering Board Manual
69	DMA Hydrographic Product Catalogs	65	World Port Index
66	Notice to Mariners Summary of Corrections	48	Guide of Marine Observing and Reporting
60	Hydrographic Products Semiannual Bulletin Digest	47	Radar Navigation Manual
65	Chart No. 1 - Nautical Chart Symbols and Abbreviations	64	Fleet Guides
63	Distances Between Ports	51	Radio Navigational Aids
7	All publications listed above		

Table 11. Rank your use of DMA text-based products from most used (1) to least used (22)

| Total # of Users	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20	#21	#22	Product
61	3	4	2	5	5	2	2	3	3	5	5	2	4	5	4	1	2			2	2		American Practical Navigator
56			2	1	2	1		1		1	3	2	3	3	1	3	2	6	7	8	10		Glossary of MC&G Terms
53				2	1		2		2	2	1	1	2	2	5	6	3	4	5	7	4	4	Handbook of Magnetic Compass Adjustments
60		1	1		8	10	5	8	3	4	5	3	7	3		1	1						List of Lights including Radio Aids & Fog Signals
56	2		3	2	3	2	4	4	6	1	5	6	1	4	3	1	3	2	1		3		Sight Reduction Tables for Marine Navigation
53				3	3	3	1	3			2	5	4		3	1	3		5	5	3	8	Sight Reduction Tables for Air Navigation
66	21	7	8	6	5	5	5	2	1	1	3	2											DMA Hydrographic Product Catalogs
60	4	17	9	7	1	3	5	2	3	5	1	1						2					Notice to Mariners Summary of Corrections
63	1	5	3	4	6	3	6	5	1	5	1	3	1	3	1	4	1	1	4	3	1	1	Hydrographic Products Semiannual Bulletin Digest
64	1	2	6	2	6	4	7	6	11	4	4	1	2	2	4	1			1				Chart No. 1 - Nautical Chart Symbols and Abbreviations
63		2	3	2	3	3	3	3	7	2	4	4	6	5	2	3	3	1	1	3	1	2	Distances Between Ports
52		1						1		1			1	1	1	1	1	1	4	7	10	24	Gazetteer of Undersea Features
62		1	7	1	6	5	5	4	6	7	4	4	5	1	2			1	1	1		1	USCG List of Lights
60	2	1		1	1	1	2		6	5	6	5	6	4	1	7	3	4	2	2		1	International Code of Signals
62	29	13	6	4	1	3	1		2	2	2	2	1										Notice to Mariners
63	3	6	8	16	3	7	5	4	2	2	1	2	3			1							Sailing Directions
57					1		1	1	1	1	4	4	2	9	3	1	8	7	5	1	6	2	Maneuvering Board Manual
65	1	1	3	2	5	1	1	6	3	8	4	5	5	1	5	4	3	3	1	2	1		World Port Index
54			1			1			2	2	1	3		6	5	4	6	12		3	4	4	Guide of Marine Observing and Reporting
54						1	1		2	1	2	1	1	5	8	8	8	5	6	3	2	1	Radar Navigation Manual
60	2	4	8	7	4	6	6	5	3	2	1	1	1	1	2	3	1	2	1	1	1		Fleet Guides
56						1	1	3	1	2	3	2	4	4	6	6	7	2	5	5	4		Radio Navigational Aids

Table 12. Rank the Sailing Directions contents according to their navigational importance:

Total # of Users	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Content Category
65	18	8	9	3	7	3	2	5	1	4		2	1	1	1		Chart Information
63	17	9	4	5	2	4	3		3	3	3	3	2	1	4		Ports
64		1	2	1	4		5	6	8	7	5	5	4	10	2	4	Geographic Names
63	1	1			1	3	2	3	6	3	9	11	6	10	3	4	Heights
62		8	4	4	4	5	2	7	6	2	4	5	5	2	4		Courses
61			5	7	7	6	5	6	5	7	5	2	3	1	1	1	Light and Fog Signals
64	20	15	10	5	2	3	2	1	2		2		1				Dangers
64	1	9	3	9	5	9	7	6	1	2	3	3	1	2	1	2	Current Directions
63	3	4	7	7	10	4	7	6	3	4	3	1		4			Coastal Features
63			1		1	1	1		1	4	3	5	2	5	17	22	Index-Gazetteer
64	1	2	4	12	1	9	4	4	4	5	4	4	4	2	3	1	Soundings
63		1	3	1	7	2	5	5	5	4	8	5	10	5	1	1	Bearings
63	1			3	6	5	2	5	6	7	4	10	6	5	3		Distances
63	1	1	8	6		4	2		1	2	6	5	8	4	13	17	Radio Navigation Aids
64	1	8	8	6	2	3	7	3	5	7	2	3	2	4	2	1	Special Warnings
66	3	2	7	2	5	4	8	6	4	2	2	7	7	3	5	5	Coastal Winds, Currents, and Ice

Appendix B.

DMAP Text Product Questionnaire

DMAP Text Product Questionnaire
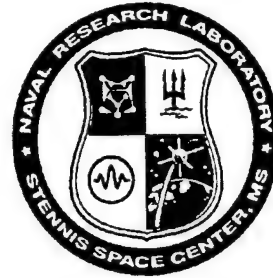
The Naval Digital Mapping, Charting and Geodesy Analysis
Program (DMAP)
Naval Research Laboratory Code 7441
Mapping, Charting and Geodesy Branch
Stennis Space Center, MS 39529-5004

October 1994

Please Fax (if possible) to: **Kevin Shaw 601 688-4853**
DSN: 485-4197

or mail to: **NRL 7441**
Stennis Space Center, MS 39529
Attn: Kevin Shaw

Background:

Your Name/Title:

Organization (Agency and Code):

Mailing Address:

Telephone: DSN:

Date this survey was completed:

The purpose of this questionnaire is to determine Navy and Marine Corps requirements in the area of digital text documents and to ensure user input into the Text Product Standard design and implementation. This survey is supported by DMA Systems Center.

Please complete this questionnaire being as complete and detailed as possible.

General:

1) Which of the listed publications do you currently use?

_____ American Practical Navigator
_____ Glossary of Mapping, Charting & Geodetic Terms
_____ Handbook of Magnetic Compass Adjustments
_____ List of Lights Including Radio Aids & Fog Signals
_____ Sight Reduction Tables for Marine Navigation
_____ Sight Reduction Tables for Air Navigation
_____ DMA Hydrographic Product Catalogs
_____ Notice to Mariners Summary of Corrections
_____ Hydrographic Products Semiannual Bulletin Digest
_____ Chart No. 1 - Nautical Chart Symbols and Abbreviations
_____ Distances Between Ports

_____ Gazetteer of Undersea Features
_____ USCG list of lights
_____ International Code of Signals
_____ Notice to Mariners
_____ Sailing Directions
_____ Maneuvering Board Manual
_____ World Port Index
_____ Guide to Marine Observing and Reporting
_____ Radar Navigation Manual
_____ Fleet Guides
_____ Radio Navigational Aids

Computer Systems:

2) What computer hardware configuration do you use?

(ex: 486 PC, 4MB ram, 250MB hard drive, sound board, color monitor)

3) Do you have a CD-ROM drive?

_____ Yes
_____ No

4) What operating system/windowing system do you use?

_____ UNIX/OpenWindows (Provide UNIX flavor and windows version number)
_____ DOS/Windows (Provide version numbers)
_____ Macintosh (Provide operating system version number)
_____ Other (Describe)

Use of DMA Products/Publications:

5) Are you currently using DMA digital products?

____ ARC Digitized Raster Graphics	____ ARC Digital Raster Imagery
____ Compressed Aeronautical Chart	____ Compressed ARC Digitized Raster Graphics
____ Controlled Image Base	____ Compressed Raster Graphics
____ Digital Bathymetric Database	____ Digital Chart of the World
____ Digital Feature Analysis Data	____ Digital Nautical Chart
____ Digital Point Positioning Database	____ Digital Terrain Elevation Data
____ World Magnetic Model	____ World Vector Shoreline

____ Navigation information Network (NAVINFONET)

____ Do not use digital products

____ Other (describe)

6) Rank your use of DMA text-based products from most used (1) to least used (22).

____ American Practical Navigator	____ Gazetteer of Undersea Features
____ Glossary of Mapping, Charting & Geodetic Terms	____ USCG list of lights
____ Handbook of Magnetic Compass Adjustments	____ International Code of Signals
____ List of Lights Including Radio Aids & Fog Signals	____ Notice to Mariners
____ Sight Reduction Tables for Marine Navigation	____ Sailing Directions
____ Sight Reduction Tables for Air Navigation	____ Maneuvering Board Manual
____ DMA Hydrographic Product Catalogs	____ World Port Index
____ Notice to Mariners Summary of Corrections	____ Guide to Marine Observing and Reporting
____ Hydrographic Products Semiannual Bulletin Digest	____ Radar Navigation Manual
____ Chart No. 1 - Nautical Chart Symbols and Abbreviations	____ Fleet Guides
____ Distances Between Ports	____ Radio Navigational Aids

7) For what purpose do you use these products? Please describe.

____ Mission planning

____ Navigation

____ Reference

____ Training

____ Other (describe)

8) In the course of using these text products, do you reference maps, charts or other text products of the applicable areas?

____ Often

____ Sometimes

____ Never

9) What are the mapping products (digital or paper) you use in conjunction with these text documents?   (an example might be that with Fleet Guides, nautical charts and Sailing Directions are used)

10) How are your text based products normally updated?
   ___ NAVINFONET
   ___ Addendum
   ___ Notice to Mariners
   ___ Hard copy replacement
   ___ Other (describe)

11) Please describe the functions your DMA publications (e.g. Sailing Directions, Fleet Guides) serve. Which publications, maps, or digital mapping databases are used together and for what purpose? (examples might include Chart 1 with Nautical charts or Sailing Directions with Distances between ports and Fleet Guides)

12) Are notes, corrections and other marginalia added to your paper text documents?
   ___ Often
   ___ Sometimes
   ___ Never

13) Rank the Sailing Directions contents according to their <u>navigational importance</u>.

___ Chart Information	___ Coastal Features
___ Ports	___ Index-Gazetteer
___ Geographic Names	___ Soundings
___ Heights	___ Bearings
___ Courses	___ Distances
___ Light and Fog Signals	___ Radio Navigation Aids
___ Dangers	___ Special Warnings
___ Current Directions	___ Coastal Winds, Currents, and Ice

14) Rank the Sailing Directions contents according to their <u>frequency of use</u>.

___ Chart Information	___ Coastal Features
___ Ports	___ Index-Gazetteer
___ Geographic Names	___ Soundings
___ Heights	___ Bearings
___ Courses	___ Distances
___ Light and Fog Signals	___ Radio Navigation Aids
___ Dangers	___ Special Warnings
___ Current Directions	___ Coastal Winds, Currents, and Ice

15) Rank the Fleet Guide contents according to their <u>navigational importance.</u>

___ Command	___ Navigation
___ Operations	___ Repair
___ Logistics	___ Environmental Protection

16) Rank the Fleet Guide contents according to their <u>frequency of use.</u>

___ Command	___ Navigation
___ Operations	___ Repair
___ Logistics	___ Environmental Protection

17) List any changes (structural, formatting, or highlighting etc.) that would make the text products you use more useful or easier to understand in a <u>digital environment.</u>

    (ex. Color/style highlighting; Content headers like PORT, BAY, HARBOR)

18) Suggest any changes or additions to the presentation of tables, charts, graphics, or photographs that would improve the text products in a <u>digital environment.</u>

    (ex: Expandable/collapsible tables; Larger and more frequent photographs)

19) In a digital environment, information can be retrieved in a variety of ways. List any entering arguments or search criteria for accessing or retrieving information from the text products which you would find useful.

    (ex: Latitude/Longitude; Items along a prescribed navigational course)

Text Product Standards working groups:

20) Would you like to be included in the Text Product Standard Prototype II evaluation group?

      ___ Yes   ___ No

21) Would you like to be part of a working group to meet in the New Orleans area in early 1995 to view demos of prototype digital text products and provide input into the development of those products?

      ___ Yes   ___ No

22) Please provide any additional comments, suggestions or questions you may have on how a digital text product could better serve you:

Appendix C.

DMA TPS Workshop Attendees

DMA TPS Workshop Attendees

Name	Agency	Address	Phone #	DSN #	FAX #
Jim Braud	NAVOCEANO	SSC, MS 39522	601 688-5196	485-5196	504 688-5101
John Breckenridge	NRL	Code 7441 SSC, MS 39529	601 688-5224	485-5224	504 688-4853
Cindy Bricker	NAVOCEANO	Code N341 SSC, MS 39522	601 688-5107	485-5107	601 688-5107
Susan Carter	NRL	Code 7441 SSC, MS 39529	601 688-4652	485-4652	504 688-4853
CDR Gary Cooper	DMA	8613 Lee Hwy Fairfax, VA	703 285-9319		703 285-9383
Tom Fetterer	NRL / PSI	Code 7441 SSC, MS 39529	601 688-4955	485-4955	504 688-4853
Pete Gruzinskas	CNMOC/NAVOCEANO	SSC, MS 39522	601 688-5749	485-5749	
Steve Hall	DMA N096	US Naval Observatory 34 & Mass Ave NW Washington, DC 20392-1800	202 653-1610	294-1610	
Michael Harris	NRL	Code 7440 SSC, MS 39529	601 688-4420	485-4420	504 688-4853
Betty Harvey	NSWC Carderock David Taylor	Code 183 Bethesda, MD 20084-5000	301 227-3348	287-3348	301 227-3393
Walter Holtgren	DMA Hydro/Topo Center Gulf Coast Rep	One Canal Place 365 Canal St., Suite 2300 New Orleans, LA 70130	504 589-2642	485-2642	504 589-2686
Ray Hughes	PRC	468 Viking Dr. Virginia Beach, VA 23452	804 498-5500		804 498-5670
Mike Jugan	NAVOCEANO	Code N341 SSC, MS 39522	601 688-4141	485-4141	

Name	Agency	Address	Phone #	DSN #	FAX #
Andy Kelly	NAVSEASYSCOM (SEAADSA)	2531 Jefferson Davis Hwy Arlington, VA 22242-5160	703 602-8700	332-8700	703 602-2818
Walt Klaus	DMA SC Code EIWW	4600 Sangamore Rd. Bethesda, MD 20816-5003	301 227-2470		301 227-4694
Dave Schneider	NAVOCEANO	Code N341 SSC, MS 39522	601 688-5666	485-5666	601 688-4234
Kevin Shaw	NRL	Code 7441 SSC, MS 39529	601 688-4197	485-4197	504 688-4853
Chris Wheedleton	SAIC	1710 Goodridge Dr. McLean, VA 22102	703 821-1433		703 821-1433
Not Attending:					
QMC Tom Cunningham	SBU-22	NSA New Orleans, LA 70142	504 336-2626	485-2626	504 336-9960
Harry Felsen	NAVSEASYSCOM	2531 Jefferson Davis Hwy Arlington, VA 22242-5160	703 602-8700		703 602-2818
QM2 Russell Gregory	SBU-22	NSA New Orleans, LA 70142	504 336-2626	485-2626	504 336-9960
QM3 Rodriguez	SBU-22	NSA New Orleans, LA 70142	504 336-2626	485-2626	504 336-9960